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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------------------|----------------------|---------------------|------------------|
| 10/519,841 | 01/12/2005 | Frank Dietsche | 263524US0PCT 7205 | |
| 22850 C. IRVIN MCC | 7590 12/18/2006 CLELLAND | EXAMINER | | |
| • | AK, MCCLELLAND, MA | KRUER, KEVIN R | | |
| 1940 DUKE ST ALEXANDRIA | · · | | ART UNIT | PAPER NUMBER |
| | -, | | 1773 | ! |
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| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | . 12/18/2006 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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| | Application No. | Applicant(s) | | | | |
|---|--|--|--|--|--|--|
| Office Action Summers | 10/519,841 | DIETSCHE ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Kevin R. Kruer | 1773 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONEE | l. ely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on Septe | ember 20 2006. | • | | | | |
| 2a) This action is FINAL . 2b) ⊠ This action is non-final. | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under E | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-9 and 16-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-9 and 16-24 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | • | | | | | |
| 9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction of the order of the order of the order or declaration is objected to by the Examiner | epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj | 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d). | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | 45 T January 1971 A | (DTO 440) | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/36/06 | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other: | (PTO-413) te atent Application (PTO-152) | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 2, 3, 8, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what is meant by "substrate 2" and "substrate 3." It is believed said claims are referring to an additional "substrate" that is present in the claimed invention. However, the "2" and "3" distinctions render the claim indefinite.
- 3. The rejection of claims 1-9 and 16-24 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been overcome.
- 4. The rejection of claims 1-9 and 16-24 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement has been overcome by argument. The equation of claim 1 is supported by the original disclosure on page 33.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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6. Claims 1-9 and 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mack et al (US 6,500,883) in view of (a) Otaki et al (US 6,482,489) and (b) Downey (US 3,880,953) or Korpman (US 4,136,071)

Mack teaches a filled polyamide composition comprising fillers surface modified by treatment with an organosilane and /or organosiloxane coating agent (abstract). Said composition has a impact strength as claimed (see example 5, column 8) and is used to product goods such as electronic devices and parts for motor vehicles (col 6, lines 25+). When used in such embodiments, said layer is attached to another layer (herein understood to read on the substrate of claim 8).

Mack does not teach the claimed multi-coat system. However, Otaki teaches a hologram laminated that reads on the claimed multi-coat system. Said hologram can be applied to high priced goods (Background of the invention) such as those made with the composition of Mack. Specifically, the hologram comprises a 1-50um thick UV curable urethane acrylate hard coat (col 5, lines 25+) and a styrene block elastomer adhesive having a thickness of 4-20um(col 52, lines 53+). Intervening the adhesive and the hardcoat may be a substrate. Said substrate is understood to read on the claimed layers of claim 2. Thus, it would have been obvious to the skilled artisan to apply the hologram to the substrate taught in Mack in order to provide an authenticating mark on said substrate.

Mack does not teach the adhesive should have the claimed Tg. However,

Downey and Korpman each teach pressure sensitive adhesives comprising styrene

block copolymers meeting the claimed limitations. Specifically, Downey teaches a block

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copolymer comprising 10-50wt% styrene (col 1, lines 45+) and Korpman teaches a block comprising 10-35wt% styrene (col 1, lines 35+). Said composition read on the Tg limitation of claim 1 when the diene is isoprene or butadiene and on the limitation of claim 21 when the diene is butadiene. Thus, it would have been obvious to utilize either of the PSAs as the styrene block copolymer PSA taught in Mack because said PSA are taught to exhibit excellent adhesive properties.

7. Claims 1-9 and 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onozawa et al (US 6,103,37) in view of (a) JP0518671 (Matsuoka) and (b) Downey (US 3,880,953) or Korpman (US 4,136,071)

Onozawa teaches a hardcoat sheet comprising a base sheet, and a coat layer which is provided on the based sheet and formed form a radiation curable urethane acrylate (abstract and col 2, lines 24+). Said layer has a thickness of 1-10um (col 3, lines 60+). The hardcoat is applied to the base sheet and an adhesive comprising styrene butadiene block copolymers having a thickness of 10-50um (col 4) is utilized to apply the laminate to a window pane (col 3, lines 63+). In use, the window pane is then attached to another layer (herein understood to read on the substrate of claim 8).

Onozawa does not teach the window pane should comprise a polymer with the claimed impact strength. However, Matsuoka teaches a window pane made of polycarbonate having a impact strength of 60kg/cm/cm or more. The examiner takes the position that said impact strength is taught with sufficient specificity to read on the claimed limitation. Thus, it would have been obvious to the skilled artisan to utilize the

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window pane taught in Matsuoka as the window pane taught in Onozawa because said window pane has excellent impact resistance.

Onozawa does not teach the adhesive should have the claimed Tg. However,
Downey and Korpman each teach pressure sensitive adhesives comprising styrene
block copolymers meeting the claimed limitations. Specifically, Downey teaches a block
copolymer comprising 10-50wt% styrene (col 1, lines 45+) and Korpman teaches a
block comprising 10-35wt% styrene (col 1, lines 35+). Said composition read on the Tg
limitation of claim 1 when the diene is isoprene or butadiene and on the limitation of
claim 21 when the diene is butadiene. Thus, it would have been obvious to utilize either
of the PSAs as the styrene block copolymer PSA taught in Onozawa because said PSA
are taught to exhibit excellent adhesive properties.

8. Claims 1-7, 9, 17-19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergh et al (2003/0104245) in view of Van Havenbergh et al (US 5,334,842).

Bergh teaches a radiation image storage panel comprising a self-support layer, a phosphor particle containing layer a urethane acrylate radiation curable protective layer (abstract). Said layer has a thickness of 1-20um (0042). The binder for the phosphor layer may comprise Kraton, which is herein understood to read on the claimed elastomeric intercoat layer (0041). Said layer has a thickness of 10-1000um (0041). An additional layer may be present between said phosphor layer and urethane acrylate protective layer (0036).

Bergh does not teach that the substrate should comprise a polymer with the claimed impact strength. However, Van Havenbergh teaches the substrate of such panels should have high strength (col 17, lines 35+) and may comprise polyethylenes such as LUMIRROR) metal polyamide, polyimide and the like. Thus, if would have been obvious to utilize polyamide and polyimides, and metals with high impact strength as the substrate taught in Bergh because Van Havenbergh teaches such substrate are desirable in radiation storage panels.

Response to Arguments

Applicant's arguments with respect to claims 1-9 and 16-24 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin R. Kruer

N-17-

Patent Examiner-Art Unit 1773